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ABSTRACT

This study was intended to ascertain the effectiveness of videotape recordings on the achievement of ninth grade students in citizenship classes versus achievement of students where that medium was not used. Subjects for the quasi-experimental study were 183 ninth grade students in selected high school citizenship classes in a large suburban district; there was also a nonrandomized control group. A pretest-posttest design was used to determine achievement. Two variables were tested for possible relationships to the scores, and t tests were used to test the relationships. No statistically significant relationships were shown between the achievement scores of the experimental subjects, who saw videotape recordings as opposed to the control group, who did not see the videotapes. There was also no statistically significant relationship between gender and the treatment and control groups. It is concluded that, although the results of the study were not statistically significant, it is important for educators to be cognizant of research on media in terms of meeting educational objectives and supporting the curriculum. Such research will help instructional leaders use their instructional resources in the most efficient manner. Copies of a teacher log sheet, the pretest, and the posttest are appended. (40 references) (DB)

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The Effectiveness of Videotape Recordings in Teaching on the Achievement of Ninth Grade Students in Citizenship Classes

by

Raphael J. Tworek

A Scholarly Study

Presented in partial fulfillment of the requirements for the degree of education specialist in Library Media Technology in the Department of Curriculum and Instruction in the College of Education at Georgia State University

Atlanta, Georgia

1992

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ABSTRACT

THE EFFECTIVENESS OF VIDEOTAPE RECORDINGS IN TEACHING ON THE ACHIEVEMENT OF NINTH GRADE STUDENTS IN CITIZENSHIP CLASSES

by

RAPHAEL JAMES TWOREK

Purpose

This study was intended to ascertain the effectiveness of videotape recordings on the achievement of ninth grade students in citizenship classes versus achievement of students where that medium was not used.

Methods and Procedures

Subjects for the quasi-experimental study were composed of 183 ninth grade students in selected high school Citizenship classes in a large suburban district; there was also a nonrandomized control group. A pretest-posttest design was used to determine achievement. Two variables were tested for possible relationships to the scores. T tests were used to test the relationships.

Results

No statistically significant relationships were shown between the achievement scores made by the experimental subjects who saw videotape recordings as opposed to the control group that did not see the videotapes. There was also no statistically significant relationship between gender and the treatment and control groups.

Conclusions

Although the results of the study were not statistically significant, it is important for educators to be cognizant of research on media in terms of meeting educational objectives and supporting the curriculum. Finally, such research will help instructional leaders use their instructional resources in the most efficient manner.

Table of Contents

	Page
List of Tables	vi
Chapter 1 - Introduction	1
Statement of the Problem	3
Research Questions	3
Significance of the Study	4
Assumptions/Delimitations	4
Summary	4
Chapter 2 - Review of the Literature	6
Chapter 3 - Methodology and Procedures	14
Design of the Study	14
Population Sample	15
Instrumentation	16
Data Collection	16
Data Analysis	17
Chapter 4 - Results of the Study	18
Research Question 1	20
Research Question 2	20
Chapter 5 - Discussion and Conclusions	26
Findings	26
Discussion	26
Applications	27
References	28

Appendices 33

Appendix A: Teacher Log 34

Appendix B: Pretest 35

Appendix C: Posttest 38

List of Tables

Table 1: Analysis of Attrition of Subjects by Teacher and Class Period 19

Table 2: Mean scores, Standard Deviations, and Standard errors by Condition..... 21

Table 3: T tests of Treatment and Control Groups With Pretests and Posttests 22

Table 4: Mean scores, Standard Deviations, and Standard errors by Gender 23

Table 5: T tests of Gender Differences With Pretests and Posttests 25

CHAPTER 1

Introduction

The medium known as television is arguably the most significant feature in the culture of American leisure time. The proliferation of television programming appears to have no end: local and national private networks, public broadcasting, cable television, local access and educational channels, videocassettes, and a host of newer formats such as interactive videodisc and hypertext applications.

Educators such as Goodlad (1984) have suggested that because television added visual images to the auditory senses, it provided another dimension to learning and left less for our imaginations. Additionally, while television has been used to inform or entertain, it has also been used to teach. Within this context, it is only reasonable that television should affect and be affected by the institution of education. As the United States enters the 1990's, one of the most prevalent forms of media in American households is the videocassette recorder(VCR). Reider (1985) projected that by 1989, 65 percent of American households would have a VCR, and that during the 1980's, the growth rate of VCRs in the schools would be greater than that of microcomputers. Dart (1991) recently reported that according to a recent Library of Congress survey, even avid readers spent more time watching television than reading books.

Further, the rise of the VCR has hastened the decline of the more traditional audiovisual instructional materials such as sound filmstrips, 16 mm motion pictures, and overhead transparencies (Nelson et. al. 1987).

Curiously, as Considine (1989) has pointed out, the VCR is a new delivery for the old curriculum in that many programs previously available in 16 mm motion picture or slide/tape format have been transferred to the video format. He also noted that because the motion picture industry has made available both classic and current films, our culture has conditioned us to regard the content more as entertainment than educational fare.

To further confuse the marriage of education and television, writers such as Postman (1986) have cited many reputable studies that suggest that television viewing doesn't significantly increase learning and is less likely than print media to encourage higher-order thinking--the implication being that educators should be more selective in the use of video/television programs as teaching tools, and should more likely aspire to the more traditional methods of teaching: lecture, chalk and talk, worksheets, crossword puzzles, games, overhead transparencies, filmstrips, and similar types of conventional pedagogy.

Given all of these considerations, and the fact that hundreds of thousands of dollars are spent on videotapes by schools throughout the country annually, it is important that administrators, teachers, and media specialists be aware of the effectiveness that videotapes have on student achievement. In this way, teaching strategies may be altered or revised to improve student performance.

Statement of the Problem

Television, or some variation of television, is going to play an ever-increasing role in our lives well into the 21st century. The VCR, as a key component to the medium, will expand its role in the education of the populace. Considine (1989) has suggested that the use of videos in social studies classes has increased because of the availability and relatively cheap access to film materials, the growth of a body of literature that addresses this process, and the fact that we are part of a communication revolution whose culture is now image-based and not print-based as had previously existed.

Pryor (1988) studied the effect of filmstrips and filmstrips on video among 11th grade U.S. History students. She found that students in the usual classroom environment learn more effectively from filmstrips than from filmstrips on video. Little is known however, about student learning when comparing the same material presented predominantly by videotape or by traditional methods. By using a research design similar to Pryor in this study, this comparison can be made.

Research Questions

In order to determine the effect of videotape recordings on student achievement, the study sought answers to the following questions:

1. Was there a significant difference in the overall achievement of

ninth grade citizenship students in the experimental groups where videotape recordings were used versus achievement of students in the control group where this medium was not used?

2. Were there gender differences in student achievement in the experimental and control groups?

Significance of the Study

This study could provide information about the effectiveness of using videotape recordings to augment instruction. The findings could be helpful to secondary school educators in determining curriculum methods, instructional effectiveness, and curriculum support.

Assumptions/Delimitations

In designing this study, it was assumed that all class sections of Citizenship students were reasonably comparable as a result of the school's or system's policy of random student placement. It is also assumed that the number of students in each group was significantly large so that a statistically significant comparison could be made.

Summary

The purpose of this study was to determine the effectiveness of videotape recordings on the achievement of students in ninth grade

citizenship classes. The findings, conclusions, and recommendations of the study were intended to provide answers to the research questions which were the basis of the study. This study should add to the body of knowledge about effective teaching mediums and could provide the impetus to examine videotape recordings and resources throughout the curriculum.

CHAPTER 2

Review of the Literature

A review of selected articles and research studies that are pertinent to this study are presented chronologically.

Hoban and VanOrmer (1950) noted that experiments with instructional films took place as early as 1918. This suggests that full motion visual media have been used since the early part of this century to record and distribute information for education.

By 1959, Kumata had analyzed the impact of instructional television on learning. In reviewing the literature, he found that most of the studies suggested no significant information gain between students taught by TV and students taught under face-to-face conditions with one exception--one researcher found knowledge retention to be proportionately better with students taught by TV as opposed to traditionally taught students. Overall, the research made three suggestions: TV was superior to traditional methods when used with voluntary audiences rather than with captive audiences; subject-matter preparation and integration of materials by the teacher positively affected learning; finally, it was found that student achievement was not affected by the TV situation itself; what was significant was the level of difficulty of the message and the perceived capability level of the instructor.

Another early researcher, A. A. Lumsdaine (1963) found that the instructional objectives of the then dominant format, films, were often stated imprecisely, if at all, making it difficult to define the appropriate criteria for evaluating them. He found that for the most part, films were seen as aids to teaching, rather than as self-contained instruments of instruction. Teachers could successfully implement the content by previewing the films, making some introductory remarks to the students before viewing, conducting follow-up discussions, and using question-and-answer sessions between sections of a film.

In a 1968 review of major studies on learning from television, Chu and Schramm found that the effectiveness of television had been documented in over 100 studies, consisting of several hundred separate comparisons, performed in developing and industrialized countries, and at every level from preschool through adult education, using a variety of methods and subject matter.

Herriott and Liebert (1972) surveyed teachers of children who had watched the educational television program, "The Electric Company" and found that 80 percent of the teachers noted some gains in specific reading skills of the children who watched the series. These included an increase in reading interest by students, improvement in the ability to decode words, spelling, and sight vocabulary.

Ten years after Lumsdaine, Levie and Dickie (1973) urged caution about the large number of media comparison studies that were still being done. They found that most of the results of these studies were insignificant and they suggested that learning objectives could be

achieved through instruction using a variety of different media. Likewise, Jamison et. al. (1974) surveyed comparisons of traditional instruction with instruction via computers, television, and radio. They found that a small number of studies reported advantages for media and other studies indicated more achievement with traditional instruction; however, the most usual outcome was no significant difference between the two methods.

Ksobiech (1976) found that student beliefs about different demands placed on them by different media influenced their approach to learning tasks. He placed 60 undergraduates in one of three groups: one group in which televised and book lessons were to be evaluated by them; another group where the lessons were to be thought of as entertainment; a final group that would be tested on the lessons. Not surprisingly, the test group performed best on the examination, the evaluation group performed next best, and the students who expected to be entertained showed the poorest performance.

Desmond (1978) found that preschool and early elementary school children could learn complex behaviors from film and television. His research indicated that if programming is designed to include interval reinforcement, then learning was retained over a longer time period.

Conversely, Hornik (1978) found that when television was introduced to a group of junior high school students in El Salvador who had little exposure to television, there was a negative association between increased television viewing and reading skills. Hornik concluded that the additional time viewing television left less time for reading.

Other studies have also questioned what children learn from television. Lorch, Anderson, and Levin (1979) found that children who were doing something else while watching television comprehended the program as well as children who were only attending to the program. The results suggested that television required less mental effort than other activities and that full attention wasn't necessary. Likewise, Hawkins, Ibok, and Pingree (1983) found a weak correlation between viewer's attentiveness when viewing television programs and the amount of learning that took place. The findings indicated that those who looked away learned as much from the program as those who were fully engaged. The authors did suggest that the programs viewed offered little substance, and full attention wasn't necessary.

Like Desmond's previous work, a study done by Desmond and Jeffries-Fox (1983) involving students from kindergarten through the second grade indicated that children can decipher advertising intent and identify persuasive techniques in commercial programming. They found that the most effective learning strategy involved role playing where the students created their own commercials. Less effective was the use of audio-visual demonstrations with interaction between students and teachers. The least effective method was when lecture was used as the primary teaching method.

However, Gold (1984) argued in favor of the lecture method over videotechnology because lectures gave her students historical frameworks and reference points, and her students appeared grateful for it. And in a study by Salomon (1984) involving sixth graders, he found that

children perceived television messages to be easier to grasp than print messages. The results suggested that students developed more and better inferences through reading than when television was used as the information source.

Reider (1985) suggested that the sound filmstrip is obsolete and that as a type of technology, the VCR has had a higher rate of growth than even microcomputers in recent years. The United States Department of Education (1987) has found that moderate television viewing can actually help students from backgrounds in which books, magazines, and other mind-enriching resources are in short supply.

Nelson et. al. (1987) conducted a survey with teachers throughout the state of Illinois and found a decline in the use of traditional media materials in classrooms, and attributed that to the fact that teacher education schools no longer require graduates to take media courses. The authors also suggested that textbooks and other paper type resources were increasing, along with VCR use.

Eckenrod and Rockman (1988) described a project that gave teachers help in searching, reviewing, and identifying materials to improve their teaching through the use of instructional television, but unfortunately the program budget was cut, so it was difficult to assess its overall impact. Fontana (1988) suggested that television allowed us to integrate rather than segment information, that administrators' attitudes toward television have changed in a more positive way, and that the cost of using the technology has become affordable.

The literature concerning video use and learning is extensive.

Both Post (1987) and Gallagher (1989) applied videos to enrich the English curriculum. Post suggested that classic films on videotape could be used to motivate learning, stimulate interest, and enrich the curriculum. They also promoted listening skills and note-taking skills, and provided the ability to cover more material by helping the teacher conserve time. Post goes on to state that this novel use of media helped to implement Madeline Hunter's "mastery teaching" model. Gallagher was convinced that video technology was the most efficient way to teach English and film.

Kourilsky and Quaranta (1987) wrote a teaching methods book which emphasized that the teacher should use conventional techniques to teach students. However, the book did make accommodations for using various kinds of media.

Talabi (1989) compared the effects of televised and programmed instruction in secondary schools in Nigeria using a pretest/posttest design. He found that for the urban location group, televised instruction was superior to programmed instruction; in the rural location group, televised instruction was more effective for high achievers while programmed instruction worked better with average and low achievers.

This next group of advocates of video technology spoke positively of the benefits that television could bestow upon its viewers. Television should not be looked upon as a holy grail, but rather another resource to use when appropriate. Spitzer, et.al. (1989), Cates (1989), Considine (1989), and Kozma (1991) suggested guidelines that would make VCR use more successful from an educational standpoint as opposed to its

entertainment value. Spitzer, et. al. stated that there was little doubt that learning and retention were comparable (if not superior) through using videos and that student attitudes toward learning with this medium was positive.

Kernan (1991) challenged school librarians to support both nonprint as well as print media because they both have their place in promoting learning, even though they are different--more traditional formats like books allow the reader to pace themselves, whereas watching a video requires both visual and verbal skills. She concluded by noting that because of different learning styles, some children may learn better through the use of videos than by reading a book.

Finally, Mernit (1991) gave several examples of creative ways to use television and make learning fun for children due to its visual immediacy.

Despite the preponderance of VCR's in our homes and schools, there is really very little information that compares teaching done primarily by videotape as opposed to nonvideo approaches. Salomon and Clark (1977) suggested that media comparison studies can be divided into two types: research with media, and research on media; the latter is more important because media variables can be examined. The present study is an example of research on media in that the videotaped presentations are thought to significantly affect student achievement in Citizenship classes. Thus, the focus is on the medium of videotape instruction and not on such confounding variables as organizational changes, curriculum reform, or novelty that could account for differences in achievement. The Pryor (1988) study, although it found little

difference between learning from sound filmstrips or sound filmstrips in video format, was probably flawed. For one thing, the pretest was the same as the posttest. Further, only four total sections (classes) made up the treatment and control group. The research design being proposed would adapt Pryor's model by addressing some of the problems caused by these confounding variables.

This selected review suggests a wide scope of the issues involved in the research on media. As the technology changes, so will the specific issues regarding the use of the technology. In any event, it might be well to heed the advice of Clark and Salomon (1986) that "the study and development of media in education are aimed at the improvement of the education, not the glorification of the media" (p. 475).

CHAPTER 3

Methodology and Procedures

Design of the Study

This was a quasi-experimental study that consisted of a nonrandomized control group pretest-posttest design. It attempted to determine whether videotape recordings affected achievement among ninth students in selected high school Citizenship classes in a large suburban school district. The independent variable consisted of the type of group (treatment or control) that students were assigned to; the dependent variable was the posttest, and the covariate was the pretest. In addition, data gathered were part of an exploratory design to examine potential gender differences and/or classroom differences.

The design and purpose of this research proposal was suggested by a study of the effect of filmstrips and filmstrips-on-video and student achievement conducted by Pryor (1988). The proposed study extended the Pryor study in that the pretest and the posttest were two different instruments. Also, exploratory data were gathered to examine whether or not there were gender differences associated with achievement based on the experimental condition.

Population Sample

The population in this study consisted of ninth grade students registered in a Citizenship course being taught by "expert" Citizenship teachers at three different high schools within the district. Working in conjunction with the school system's Social Studies coordinator and local school administrators, the following criteria were used to identify each of the four "expert" teachers who were asked to voluntarily participate in this study: classroom performance; number of years of teaching experience; number of years teaching the Citizenship course; highest degree held; work on system wide curriculum development committees; participation in staff development/inservice programs; extra-curricular Social Studies involvement. Permission to conduct this study within the system was obtained. Each of the four expert teachers was randomly assigned to either the treatment or the control group. The population of the study consisted of 248 students in 9 classes taught by 4 different teachers in three schools. In one school two teachers (five classes) were teaching the course.

Instrumentation

Each of the four teachers involved in the study (two per condition) received a school resource package, "Taxes in U.S. History" (McCorkle, 1990); this instructional series was designed to enhance the teaching of

U.S. History, Economics, and Citizenship. It includes three-20 minute student videos, a teacher video that offers suggestions about teaching the unit, a poster, and related print materials. The only difference between the two conditions is that teachers in the treatment group showed the accompanying videotapes while those in the control group did not. All teachers had access to the rest of the materials in the resource package.

The pretest/posttest consisted of questions taken from Gwinnett Educational Management System (GEMS) tests, materials accompanying the series, and questions from accompanying materials to the Civics textbook that was adopted by the school system. The results of the two tests were compared and analyzed based on assignment to the treatment or the control group. Internal validity was controlled in that both treatment and control groups took both tests, and the experiment lasted the same time period for both groups so that testing, maturation, instrumentation, and mortality were identical. Individual teacher logs (Appendix A) were kept to monitor time use, verify utilization of the materials assigned to the study and provide exploratory data concerning the results of the study.

Data Collection

The resource package on "Taxes in U.S. History" was delivered to each of the four teachers early in 1992. Testing packages were delivered toward the end of January, 1992. The actual study took place in early

February, 1992, and lasted for five days. The data, which consisted of scores on pretests and posttests (Appendices B & C) , were collected at the end of the fifth day. To maintain confidentiality, each student was given a unique number, and each teacher was given a unique identifier.

Data Analysis

Student pre and posttests were scored by an automatic grading machine; individual and mean scores were recorded; t-tests were used to compare the pretest/posttest scores by condition and gender. Incomplete data were thrown out.

CHAPTER 4

Results of the Study

From the sampled population of 248 ninth grade students, a total of 183 useable instruments were collected. Students who were identified by the teacher as having been absent any day during the five days of the study (N=35) were dropped from the analysis. Thirty students were lost due to the fact that their status on the teacher rolls indicated they were in grades 10, 11, or 12. (For a complete analysis of the attrition of subjects, see tables 1). The control group consisted of 124 students from six classes, and the experimental treatment group consisted of 59 students from three classes. The sample was almost equally balanced between males (49.7%) and females (50.3%).

Table 1

Analysis of Attrition of Subjects by Teacher and Class Period

Teacher	Class Period	N lost	N in Study
1	1	5	15
	2	8	16
	4	3	32
2	1	12	17
	3	8	22
	4	9	22
CONTROL GROUP TOTAL		45	124
3	5	7	22
4	2	7	18
	3	6	19
EXPERIMENTAL GROUP TOTAL		20	59
GRAND TOTAL		65	183

Research Question 1

Was there a significant difference in the overall achievement of citizenship students in the experimental groups where videotape recordings were used versus achievement of students in the control group where this medium was not used? Table 2 gives a summary of the performance of the experimental and control groups on the tests administered for this project. Research Question 1 was tested using *t* tests of the control and experimental groups on the pretests and the posttests. The assumption of homogeneity was met. As indicated in Table 3, there was no statistically significant difference at the .05 level between the two groups with regard to achievement in ninth grade Citizenship classes where videotape recordings were used.

Research Question 2

Were there gender differences in student achievement in the experimental and control groups? Table 4 gives a summary of the performance by gender of the experimental and control groups on the tests administered for this project. Research Question 2 was tested using *t* tests to determine gender differences on the pretest and the posttest. The assumption of homogeneity was met.

Table 2

Mean scores, Standard Deviations, and Standard errors by Condition

Group	N	Mean	s	Standard Error
Pretest				
Control	124	12.0323	3.139	.282
Experimental	59	12.1017	3.351	.436
Posttest				
Control	124	11.9677	2.843	.255
Experimental	59	12.7966	2.709	.353

Table 3

T tests of Treatment and Control Groups

With Pretests and Posttests

Source	df	t value	p value
Pretest	181	-.14	.891
Posttest	181	-1.87	.063

Table 4

Mean scores, Standard Deviations, and Standard errors

by Gender

Group	N	Mean	s	Standard Error
Pretest				
Male	91	11.9780	3.242	.340
Female	92	12.1304	3.173	.331
Posttest				
Male	91	12.4396	2.964	.311
Female	92	12.7966	2.670	.278

As indicated in Table 5, there was no significant difference at the .05 level between the two groups with regard to achievement in ninth grade Citizenship classes where videotape recordings were used.

Table 5

T tests of Gender Differences

With Pretests and Posttests

Source	*df*	*t* value	*p* value
Pretest	181	-.32	.748
Posttest	181	.98	.330

Chapter 5

Discussion and Conclusions

Findings

With regard to research question #1, there was no significant difference between the treatment group that viewed the videotapes and the control group that didn't. However, because the $p<.063$, the results suggest that achievement by the treatment group was approaching significance.

With regard to research question #2, there was no significant difference by gender among the treatment group and the control group.

Discussion

The results of this study are consistent with the findings of Lumsdaine (1963), Levie and Dickie (1973), and Jamison et. al. (1974), who found that media comparison studies were largely insignificant.

There were several limitations to this study. For one thing, the groups were not equal; there were three treatment groups and six control groups, which happened due to random selection. Also, as Ksobiech (1976) found, it is difficult to determine whether or not all teachers treated the study in the same way. Thus, if the teachers used the pre/posttests as grades, it is possible that those students did better than those who thought it didn't matter. Another limitation could be that the study lasted only for the duration of a one week period; perhaps a longer

period of time would have yielded significant results. Finally, a pilot test of the items might have given a comparison group to further validate the test instruments.

Further studies might attempt to solidify the "expert" teacher criteria. Also, it might be useful for the same group of students to participate in another video study during the semester as a comparison. Desmond (1978) suggested that interval reinforcement improves retention; possibly using a follow up test of the students at a later time might yield some data on student achievement and the duration of video and learning.

Applications

This study does have possible application in the field of media and social studies. From the standpoint of curriculum methods, attempts to evaluate media could be done in a scientific way to determine their effectiveness in meeting educational objectives and supporting the curriculum. This study attempted to do just that and could serve as a model for videotape selection if the study were replicated in light of issues raised in the discussion section. Also, media specialists, teachers, and instructional leaders should be aware of studies such as this one so that they use their instructional resources in the best manner possible.

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Appendices

Appendix A

TEACHER LOG

Teacher ID_____

DATE	ACTIVITIES/ STRATEGIES	APPROXIMATE NUMBER OF MINUTES	MATERIAL USED
Example	-filmstrip	25 minutes	
	-large group	15 minutes	~Transparency 1
	-small group/ worksheet	5 minutes	~Chalkboard
	-lecture	10 minutes	
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			

Appendix B
PRETEST

DIRECTIONS: On the separate answer sheet provided, shade in the BEST answer to the question.

1. The country MOST important to the development of the American political system is:
A) France
B) Spain
C) England
D) Italy

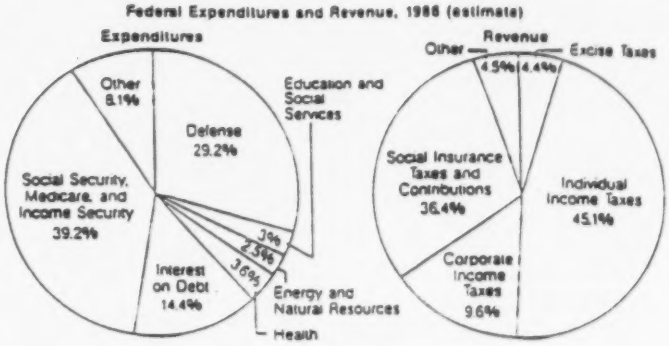

FIGURE A

2 - 5. Answer the next four questions by referring to FIGURE A.

FIGURE A

2 - 5. Answer the next four questions by referring to FIGURE A.

2. Which two areas of federal revenue are the largest?
A) "Defense" and "Social Security, Medicare, and Income Security"
B) "Individual Income Taxes" and "Corporate Income Taxes"
C) "Social Insurance Taxes and Contributions" and "Social Security, Medicare and Income Security"
D) "Individual Income Taxes" and "Social Insurance Taxes and Contributions"

3. Which area of federal expenditures received the LEAST funding?
A) Health
B) Defense
C) Interest on the national debt
D) Energy and natural resources

4. If Congress made equal percentage budget cuts in all categories of expenditures, where would most dollars be saved?
A) Defense
B) Social Security
C) Energy and Natural Resources
D) Interest on the National Debt

5. How are the expenditures of Education and Social Services, and Energy and Natural Resources similar?
A) Each receive less than 5% of the money
B) Each receive more than 5% of the money
C) If you add the amounts together, they receive more money than Defense
D) If you add the amounts together, they receive less money than Health

6.

Group A	Group B
National Defense	Excise Taxes
Human Resources	Income Taxes
Health	Social Security Taxes

Which statement accurately contrasts these two groups?
A) Group A lists federal expenditures while Group B lists federal income sources
B) Group A lists federal income sources while Group B lists federal expenditures
C) Group A deals with foreign policy while Group B deals with domestic programs
D) Group A deals with health concerns while Group B deals with trade policies

7. A tax paid by people who buy and sell foreign-made products in the United States is called:
A) an excise tax
B) a tariff
C) a gift tax
D) a corporate income tax

8. The federal government needs revenue from taxes to pay for:
A) highways, armed forces, and jewelry
B) highways, armed forces, and federal courts
C) armed forces, federal courts, and state of Georgia expenses
D) federal courts, highways, and Gwinnett County parks

9. Which of the following is NOT an example of a government good or service?
A) Interstate 85
B) Gwinnett Tech
C) Gwinnett Place Mall
D) Lawrenceville Courthouse

10. A tax system whereby people with higher incomes pay a higher portion(percentage) of their income in taxes is called:
A) graduated income tax
B) flat rate tax
C) sales tax
D) personal property tax

11. An example of a natural resource is a/an:
A) factory worker
B) college student
C) interstate highway
D) acre of land

12. Which branch of government carries out the laws of the United States?
A) Legislative
B) Executive
C) Judicial
D) Military

13. All of the following are sources of income EXCEPT:
A) salaries
B) moving expenses
C) dividends
D) profit

14. The first national constitution of the United States was called the:
A) Articles of Confederation
B) Olive Branch Petition
C) Declaration of Independence
D) Mayflower Compact

15. In what year did the Nullification Crisis end?
A) 1827
B) 1828
C) 1832
D) 1833

16. The issue of fairness in taxation focuses on:
A) what should be taxed
B) who ought to pay
C) how much should be paid
D) all of the above

17. Which section of the country felt that the Tariff of 1828 was most unfair?
A) The West
B) The North
C) The South
D) The Tariff of 1828 was felt to be unfair in all sections of the country

18. What is the deadline for filing federal income taxes?
A) January 15th
B) April 15th
C) June 30th
D) December 31st

19. Which statement is NOT true?
A) If Congress implements a tax deduction for charitable contributions, it will discourage people from giving more money to charities
B) If Congress implements a tax deduction for interest paid on home mortgages, it will encourage the purchase of homes
C) If Congress eliminates the tax deduction for interest paid on credit card charges, it will discourage people from using their credit cards
D) If the interest earned on U. S. savings bonds is exempt from state and local taxes, it will encourage people to buy federal bonds

20. Who was President of the United States during the Protective Tariff issue?
A) Andrew Jackson
B) Martin Van Buren
C) John Calhoun
D) Henry Clay

Appendix B
POSTTEST

DIRECTIONS: On the separate answer sheet provided, shade in the BEST answer to the question.

1. Which of the following is an OPINION about the United States government under the Articles of Confederation?
A) The Articles denied Congress the power to tax
B) A nine out of thirteen vote was necessary to pass any law
C) The Articles were too weak to accomplish much
D) There was no executive branch under the Articles

2. An example of shifting resources from the private to public(government) use is:
A) using steel to produce more aircraft carriers and giving up bridges
B) using concrete to produce more prisons and giving up highways
C) using rubber to produce more tires for mail trucks and giving up tires for family cars D) using cloth to produce more personal clothing and giving up military uniforms

3. Which of the following became an important source of government revenue when the U.S. Constitution was adopted in 1788?
A) A lottery
B) Borrowing money from the states
C) Taxes
D) Selling public land

4. Which of the following statements BEST describes why George Washington sent troops to put down the Whiskey Rebellion?
A) The Whiskey tax was unfair to farmers
B) Taxes are required payments imposed by governments
C) The legislature of Pennsylvania declared the Whiskey tax "uncollectible"
D) Corn farmers were attacking whiskey mills

5. U. S. tariffs on foreign automobiles would:
A) encourage people to buy more imported automobiles
B) discourage people from buying American automobiles
C) discourage people from buying foreign automobiles
D) encourage people to buy more imported and more American automobiles

6. A tax deduction for interest paid on home mortgages encourages:
A) people to buy houses
B) people to rent apartments
C) home builders to build fewer houses
D) people to pay cash for their homes

7. The economic term used to identify what has been given up when a choice is made is: A) social opportunity
B) opportunity cost
C) cost reduction
D) real benefit

8. Which of the following statements BEST describes the "ability-to-pay" measure of tax fairness?
A) People should be allowed to pay taxes in cash, by check, or with a credit card
B) People with higher incomes should pay more taxes
C) People should have their taxes taken out of their paychecks
D) People should start paying taxes when they are in their forties

9. The money raised by a government to pay for its activities is called:
A) a budget
B) revenue
C) expenditures
D) grants

10. Which statement most accurately describes the conditions in the South in the 1830's? A) It faced the same economic problems as people in the North
B) It was dependent on agriculture for its prosperity
C) It featured slaves in over half the households
D) It was dependent on industry and commerce for its prosperity

11. Had a compromise tariff not been reached between the different sides, what was the most likely outcome of this crisis?
A) Recession
B) Secession
C) Depression
D) Acceptance

12. How often must people file a tax return with the Internal Revenue Service(IRS)?
A) Every 3 months
B) Every 6 months
C) Every year
D) Every 2 years

13. A tax on some goods to protect certain American industries from foreign competition is called a/an:
A) revenue tariff
B) graduated tax
C) excise tax
D) restrictive tariff

14. Which of the following were most opposed to the passage of a graduated income tax?
A) Conservative Republicans
B) Western farmers
C) Populists
D) Progressives

15.

Group A	Group B
Wages	Charitable contributions
Interest	Personal property taxes
Dividends	Tornado damage

Which statement accurately contrasts these two groups?
A) Group A lists sources of income and Group B lists deductions
B) Group A lists sources of income and Group B lists adjustments to income
C) Group A represents deductions to income and Group B represents taxable income
D) Group A represents liabilities and Group B represents assets

16. Under the Articles of Confederation, the central government consisted of:
A) a Senate and the House of Representatives
B) a Congress in which each state had one vote
C) three branches of government
D) a council in which each state has seven votes

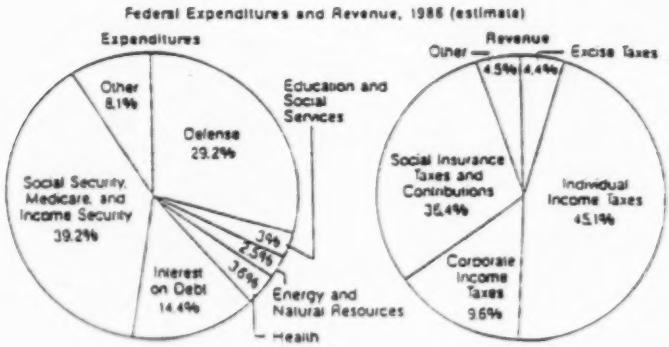

FIGURE A

17-20.

Answer the next four questions by referring to FIGURE A.

Figure A

17-20. Answer the next four questions by referring to Figure A.

17. Which is the largest portion of federal revenue?
A) Excise taxes
B) Corporate income taxes
C) Social insurance taxes and contributions
D) Individual income taxes

18. Which two areas of federal expenditures are the largest?
A) "Health" and "Other"
B) "Social Security, Medicare, and Income Security" and "Defense"
C) "Energy and Natural Resources" and "Education and Social Services"
D) "Defense" and "Interest on Debt"

19. From a taxpayer's viewpoint, what source of revenue could the government increase that would have the LEAST negative reaction to fund needed government programs?
A) "Individual income taxes"
B) "Social insurance taxes and contributions"
C) "Corporate income taxes"
D) "Excise taxes"

20. Which areas of federal expenditures or revenue are most similar on a percentage(%) basis?
A) "Education and Social Services" and "Health"
B) "Interest on Debt" and "Defense"
C) "Individual Income Taxes" and "Other"
D) "Corporate Income Taxes" and "Excise Taxes"